National School on Neutron and X-ray Scattering August 10-24, 2003

Building 223 Auditorium, Room B002 Argonne National Laboratory Argonne, Illinois

Sunday, August 10

3:00 p.m. until 7:00 p.m. - An informal get together is scheduled in the Lodging Facility Exchange Club located in the lower level of Building 617. Food and beverages will be provided. All School participants and program presenters are invited to attend.

SCHEDULE FOR SCHOOL OPENING - Monday, August 11, 2003 (Tentative)

Time/Date	Monday August 11			
8:00 - 9:00	Registration and Continental Breakfast (Foyer of Building 223 Auditorium)			
9:00	Opening Remarks TBA			
	Argonne National Laboratory			
	Welcome Dr. Harold W. Myron Director Division of Educational Programs Argonne National Laboratory			
	Dr. Raymond Osborn Physicist Materials Science Division Argonne National Laboratory			
	Dr. Dean R. Haeffner Group Leader/Physicist Advanced Photon Source Experimental Facilities Division Argonne National Laboratory			
9:10 - 10:00	9:10 - 10:00			
	S. K. Sinha University of California, San Diego			
		(1)		

10:00 - 10:30	Break	
10:30 - 11:30	Lecture Continued	
	Interaction of X-rays and Neutrons With Matter	
		(1)
11:30 - 12:00	Group Photo	
12:00 - 1:00	Lunch	
1:00 - 2:00	Lecture	
	X-ray Generation/Detection	
	D. M. Mills	
	Argonne National Laboratory	
		(2)
2:00 - 2:15	Break	
2:15 - 3:15	Lecture Continued	
	X-ray Generation/Detection	
		(2)
3:15 - 3:30	Break	
3:30 - 5:30	Safety Training/Tour	
	IPNS Safety Training	
	IPNS Tour	
6:00	Shopping Bus	•
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Program - Week 1 (Tentative)

Time/Date	Tuesday August 12	Wednesday August 13	Thursday August 14	Friday August 15	Time/Date	Saturday August 16	Sunday August 17
8:30 - 9:30	Lecture Continued Interaction of X-rays and Neutrons With Matter	Lecture Neutron/Generation Detection	Lecture Reflectivity C. F. Majkrzak	Lecture Magnetic Scattering C. F. Majkrzak	9:00 - 10:00	Lecture Neutron Sources J. J. Rhyne	Free Time
	S. K. Sinha University of California, San Diego	T. E. Mason Spallation Neutron Source	National Institute of Standards and Technology	National Institute of Standards and Technology		University of Missouri - Columbia	
	(1)	(4)	(6)	(8)		(10)	
9:30 - 9:45	Break	Break	Break	Break	10:00 - 10:15	Break	
9:45 - 10:45	Lecture Continued Interaction of X-rays and Neutrons With Matter	Lecture Continued Neutron/Generation Detection	Lecture Continued Reflectivity	Lecture Continued Magnetic Scattering	10:15 - 11:15	Lecture Amorphous Scattering P. A. Egelstaff	
	(1)	(4)	(6)	(8)		University of Guelph (11)	
10:45 - 11:00	Break	Break	Break	Break	11:15 - 11:30	Break	
11:00 - 12:00	Lecture Neutron Instrumentation	Lecture X-ray Instrumentation	Lecture Single Crystal Diffraction	Lecture Powder Diffraction	11:30 - 12:30	Lunch	
	T. E. Mason Spallation Neutron Source	D. M. Mills Argonne National Laboratory	T. F. Koetzle Brookhaven National Laboratory	J. J. Rhyne University of Missouri - Columbia			
	(3)	(5)	(7)	(9)			
12:00 - 12:15	Break	Break	Break	Break	12:30 - 6:30	Experiment 2B	
12:15 - 1:15	Lunch	Lunch	Lunch	Lunch		See attached	
1:15 - 2:15	Lecture Continued Neutron Instrumentation	Lecture Continued X-ray Instrumentation	Lecture Continued Single Crystal Diffraction	Lecture Continued Powder Diffraction		"Experiments Schedule"	
	(3)	(5)	(7)	(9)			
2:15 - 2:45		Break	Break	Break	1		
2:15 - 5:30	Break						
	Safety Training/Tour APS Safety Training APS Tour CD Introduction						
2:45 - 9:30		Experiment 1 Introduction	Experiment 1B See attached "Experiments Schedule"	Experiment 2 Introduction Experiment 2A	6:30	Social Event - Picnic	
		Experiment 1A See attached "Experiments Schedule"		See attached "Experiments Schedule"			

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Program - Week 2 (Tentative)

Time/Date	Monday August 18	Tuesday August 19	Wednesday August 20	Thursday August 21	Friday August 22	Saturday August 23	Sunday August 24
8:30 - 9:30	Lecture Inelastic Scattering B. D. Rainford University of Southampton (12)	Lecture Imaging S. R. Stock Northwestern University (14)	Lecture EXAFS E. A. Stern University of Washington (16)	Lecture Real/Reciprocal Space Complementarity J. M. Gibson Argonne National Laboratory (19)	Lecture Spin Echo R. Pynn Los Alamos National Laboratory (20)	9:00 a.m. Student Presentations	School participants depart for home
9:30 - 9:45 9:45 - 10:45	Break Lecture Continued Inelastic Scattering (12)	Break Lecture Continued Imaging (14)	Break Lecture Continued EXAFS (16)	Break Lecture Continued Real/Reciprocal Space Complementarity (19)	Lecture Inelastic X-ray Scattering E. D. Isaacs Bell Laboratories Lucent Technologies (21)		
10:45 - 11:00	Break	Break	Break	Break	Break		
11:00 - 12:00	Lecture Small Angle Scattering G. G. Long National Institute of Standards and Technology (13)	Lecture Nuclear Resonant Inelastic X-ray Scattering W. Sturhahn Argonne National Laboratory (15)	Lecture Coherent X-ray Scattering L. Lurio Northern Illinois University (17)	Early Lunch	Lecture Diffuse Scattering G. E. Ice Oak Ridge National Laboratory (22)		
12:00 - 12:15	Break	Break	Break	12:30 - 5:30 p.m.	Break		
12:15 - 1:15	Lunch	Lunch	Lunch	Experiment 4B	Lunch	1:00 p.m.	
1:15 - 2:15	Lecture Continued Small Angle Scattering G. G. Long National Institute of Standards and Technology (13)	Free Time	Small Angle Scattering in Structural Biology P. Thiyagarajan Argonne National Laboratory (18)	See attached "Experiments Schedule"	Synchrotron Sources G. E. Ice Oak Ridge National Laboratory (23)	School Closing Social Event - Picnic	
2:15 - 2:30	Break	Break	Break				
2:30 - 9:30	Experiment 3 Introduction Experiment 3A See attached "Experiments Schedule"	Experiment 3B See attached "Experiments Schedule"	Experiment 4 Introduction Experiment 4A See attached "Experiments Schedule"		Preparation of Reports		